

GENE-MODIFIED HEMATOPOIETIC STEM/PROGENITOR CELL BASED THERAPY FOR HIV DISEASE

Grant Award Details

GENE-MODIFIED HEMATOPOIETIC STEM/PROGENITOR CELL BASED THERAPY FOR HIV DISEASE

Grant Type: Disease Team Research I

Grant Number: DR1-06893

Project Objective: The Objective of this Award is to conduct and complete a Phase I/II Study with Gene Modified Hematopoietic Stem / Progenitor Cell Therapy for HIV.

The approach is the reduction of the HIV-1 co-receptor CCR5 and blocking fusion of the HIV-1 to the cell membrane through expression of the C46 peptide. These targets are the subject of other therapeutic candidates and trials but the unique aspect of this trial is that it targets both of these proteins via gene delivery in the same vector and that both autologous T cells and hematopoietic stem/progenitor cells are modified.

The therapeutic candidate is Cal-1 (lentivirus delivery of shRNA for CCR5 and for C46) modified CD34+ Hematopoietic Stem Progenitor Cells (HSPC) and Cal-1 modified CD4+ T lymphocytes (T cells) with and without Conditioning with Busulfan in HIV-Infected Adults Previously Exposed to ART.

The primary endpoints of this study are the safety and feasibility of the introduction of Cal-1, gene-transduced, hematopoietic cell populations (HSPCtn and Ttn) and the safety of non-myeloablative conditioning with intravenous busulfan as a means to improve HSPCtn engraftment.

Investigator:

Name:	Geoff Symonds
Institution:	Calimmune, Inc.
Type:	PI

Disease Focus: HIV/AIDS

Human Stem Cell Use: Adult Stem Cell

Award Value: \$8,278,722

Status: Active

Progress Reports

Reporting Period: Year 1

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Reporting Period: Year 2

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Reporting Period: Year 3 + NCE

View Report

Grant Application Details

Application Title: GENE-MODIFIED HEMATOPOIETIC STEM/PROGENITOR CELL BASED THERAPY FOR HIV DISEASE

Public Abstract:

**Statement of Benefit to
California:**

Source URL: <https://www.cirm.ca.gov/our-progress/awards/gene-modified-hematopoietic-stemprogenitor-cell-based-therapy-hiv-disease>